## **PATENTS**

A. & A. Ref. No. 80342

FGRM NO. 3

ADAMS & ADAMS
PATENT ATTORNEYS
MASADA BUILDING
PRETORIA

AS FILED

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## REPUBLIC OF SOUTH AFRICA

The Patents Act, 1952

## COMPLETE SPECIFICATION

Application No. 75/2433

Here insert (in full) name, address of applicant(s) as in application form.

## GIDEON JOHANNES LE ROUX

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Here insert title (verbally agreeing with that in the application form.)

(b)

"Method and means for observing geological Phenomena"

I/We do hereby declare this invention, the manner in which and the method by which it is to be performed, to be particularly described and ascertained in and by the following statement:-

THIS INVENTION relates to a dowsing device.

According to the invention there is provided a dowsing device which includes:

a protractor;

a handle fast with the protractor whereby the device may be held with the axis of the protractor directed upwardly; and

a metallic rod mounted to be pivotable about the axis and to extend radially at right angles thereto so as to be arcuately displaceable over the graduations of the protractor, whereby the position of the metallic rod relative to the graduations may be read off. The free end of the metallic rod may have a thickened portion. The thickened portion may be of a material different from that of the metallic rod.

The dowsing device may further include a compass. By means of the compass the attitude of the device relative to the earth's magnetic north may be determined.

The dowsing device may further include a spirit level arranged to indicate verticallity of the said axis.

Restraining means may be provided for frictionally restraining displacement of the rod around its pivotal axis. The restraining means may be adjustable to adjust the restraining action thereof.

The pivotally mounted end of the metallic rod may be bent through right angles so as to form an axially extending portion which is co-axial with the pivotal axis of the rod. The axially extending portion is conveniently journalled in a bore in the handle.

The transition between the radially extending and the axially extending portion of the rod may include a portion which is bent through an angle of more than  $90^{\circ}$  .

The invention will now be described in more detail, by way of example, with reference to the accompanying drawings. In the drawings:

Figure 1 shows a plan view of a dowsing device according to the invention; and

Figure 2 shows a side view of the device.

Referring now to the drawings, reference numeral 10 denotes a handle having an axial bore in which an axially extending portion or vertical limb 12 of an inverted L-shaped metallic rod 14 is rotatably journalled. On the top end of the handle and at right angles to the bore therein, in which the limb 12 is journalled, a protractor 16 is fixed. The axis of the protractor extends through its centre and is directed normal to its plane. The axis of the protractor is co-incident with the axis of rotation of the metallic rod 14. The protractor 16 shown extends through 360° but it may also extend through 180° only. On the protractor 16 a compass 18 is mounted. A spirit level 18.1 is further mounted on the protractor. of a single spirit level 18.1, a pair of spirit levels 18.2 arranged at right angles to one another (shown in dotted lines in Figure 2) may be provided.

On the free end of the radially extending portion or horizontal limb 12.1 of the L-shaped rod 14 a head 20 is fixed to provide the rod with a thickened portion. If the rod 14 is, for example, of brass, the head may be of a different material such as, for example, lead. The transition between the horizontal limb 12.1 and the vertical limb 12 is in the form of a bow-shaped portion 12.2 which is bent through an angle of 1800 to provide for additional flexing of the rod when in use. The portion of the horizontal limb 12.1 adjacent the bow-shaped portion 12.2 is arcuately displaceable over the protractor in spaced relationship thereto as is shown at A.

On the vertical limb 12 a thrust flange 22 is provided which bears on the protractor around the journal forming bore for the limb.

Internally of the handle 10, the vertical limb

12 of the metallic rod is provided with a thickened portion

24 having a round cylindrical outer surface. On the

handle 10 adjacent the thickened portion 24 there is

mounted an outwardly protruding trigger like button 26.

The button 26 is provided internally with a pad 28 of

friction material adapted to engage with the cylindrical

surface of the thickened portion 24, thereby frictionally

to restrain pivotal displacement of the rod 14. The button

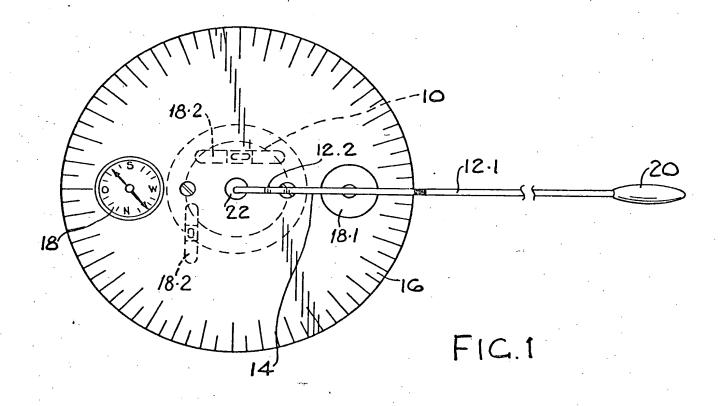
is biassed outwardly by a spring (not shown) or other

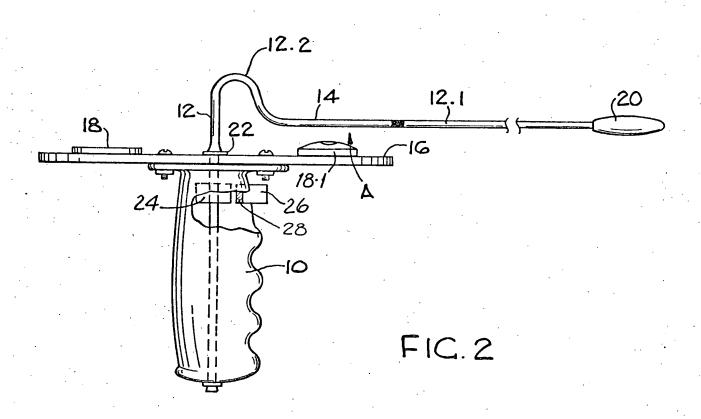
suitable biassing means, so that, when, the button 26

is released, the pad 28 is out of engagement with cylindrical surface of the thickened portion 24.

In use, a person holds a dowsing device as shown in each hand. With the aid of the spirit levels 18.1 he ensures that the pivotal axes of the metallic rods 14 are maintained in a vertical attitude. He then walks across the land and observes any movement of the rods 14. The direction in which he walks may be read off from the compasses 18. If he wishes to restrain pivotal displacement of the rods, he applies pressure to the buttons 26 with his index fingers. A small or large restraining force may be applied by exerting appropriate pressure on the buttons.

In this manner, the applicant has used the device in searching for geological faults, underground water, minerals, etc. He has also found the device to be suitable for use as a toy, and he suggests that it may also be employed by scholars for scientific or other interesting projects.





Having now particularly described and ascertained my said invention and in what manner the same is to be performed, I declare that what I claim is:

- 1. A dowsing device which includes:
  - a protractor;
- a handle fast with the protractor whereby the device may be held with the axis of the protractor directed upwardly; and

a metallic rod mounted to be pivotable about the axis and to extend radially at right angles thereto so as to be arcuately displaceable over the graduations of the protractor, whereby the position of the metallic rod relative to the graduations may be read off.

- 2. A dowsing device as claimed in claim 1, in which the free end of the metallic rod has a thickened portion.
- 3. A dowsing device as claimed in claim 2, in which the thickened portion is of a material different from that of the metallic rod.
- 4. A dowsing device as claimed in any one of the preceding claims, which further includes a compass.
- 5. A dowsing device as claimed in any one of the preceding claims, which further includes a spirit level arranged to indicate verticallity of the said axis.

- 6. A dowsing device as claimed in any one of the preceding claims, in which restraining means are provided for frictionally restraining displacement of the rod around its pivotal axis.
- 7. A dowsing device as claimed in claim 6, in which the restraining means is adjustable to adjust the restraining action thereof.
- 8. A dowsing device as claimed in any one of the preceding claims, in which the pivotally mounted end of the metallic rod is bent through right angles so as to form an axially extending portion which is co-axial with the pivotal axis of the rod.
- 9. A dowsing device as claimed in claim 8, in which the axially extending portion of the rod is journalled in a bore in the handle.
- 10. A dowsing device as claimed in claim 8 or claim 9, in which the transition between the radially extending and the axially extending portion of the rod includes a portion which is bent through an angle of more than  $90^{\circ}$ .

11. A dowsing device substantially as herein described and as illustrated in the drawings.

DATED THIS 14th DAY OF May 1976

ADAMS & ADAMS
APPLICANTS PATENT ATTORNEYS